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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,202	11/18/1999	GREGORY DAVID DOOLITTLE	EN999058	6901

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EXAMINER	
WILLETT, STEPHAN F	
ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/443,202	Applicant(s) Doolittle et al.
	Examiner Stephan Willett	Art Unit 2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jan 27, 2003* .

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-4, 9-11, 14-22, 27-30, 35-37, 40-48, 53-56, 58-61, 66-68, and* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-4, 9-11, 14-22, 27-30, 35-37, 40-48, 53-56, 58-61, 66-68, and 71-7.* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 9-11, 14-22, 27-30, 35-37, 40-48, 53-56, 58-61, 66-68 and 71-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoening et al. with Patent Number 6,202,465 in view of Furlani et al. with Patent Number 5,995,998.

4. Regarding claim(s) 1, 27, 53, 58, Schoening teaches a manipulation of threads within a computer network. Schoening teaches receiving a 1st request, col. 35, lines 26-27. Schoening teaches the 1st request waiting for a response from a 2nd request, col. 35, lines 27-28. Schoening teaches selecting from a thread pool, col. 35, lines 47-55. Schoening teaches altering eligible

thread pools, col. 40, lines 43-45. Schoening teaches altering thread pools as "the timeBase providing the partial order of Service Module Functions needed to effectuate the needed services is selected", col. 42, lines 22-24 and col. 41, lines 39-42 and as a partial order, col. 41, lines 3-14. Schoening teaches the invention in the above claim(s) except for explicitly teaching altering existing eligible thread pools to serve a request. In that Schoening operates to generate multiple threads the artisan would have looked to the networking arts for details of implementing thread allocation. In that art, Furlani, a related network thread adapter, teaches "often two independent groups of interdependent objects become themselves interdependent", col. 6, lines 31-32 in order to process a request. Furlani specifically teaches "in this circumstance the groups and their group locks must be merged", col. 6, lines 32-33. Determining different eligible thread groups or process configurations to complete a request is taught. Further, Furlani suggests that "the two groups must be merged into one group", col. 6, lines 44-45 which results from implementing his thread groupings to create new eligible groups. The motivation to incorporate eligible thread groupings insures that deadlocks among other delays are overcome. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the eligible grouping of threads as taught in Furlani into the network described in the Schoening patent because Schoening operates with threads and Furlani suggests that optimization can be obtained by manipulating thread configurations. Therefore, by the above rational, the above claim(s) are rejected.

5. Regarding claims 2-3, 28-29, 59-60, Schoening teaches masking thread pools, col. 41, lines 1-5. Thus, the above claim limitations are obvious in view of the combination.

6. Regarding claims 4, 30, 61, Schoening teaches alter processing when a wait state is

recognized, col. 39, lines 65-67. Thus, the above claim limitations are obvious in view of the combination.

7. Regarding claims 9, 35, 66, Schoening teaches altering thread groups for other parallel processes, col. 40, lines 36-38. Thus, the above claim limitations are obvious in view of the combination.

8. Regarding claims 10-11, 36-37, 67-68, Schoening teaches thread pools based on call backs, col. 15, lines 46-48 and col. 16, lines 7-8. Thus, the above claim limitations are obvious in view of the combination.

9. Regarding claims 14-15, 18, 40-41, 44, 54, 71-72, 75, Schoening teaches requests at servers, col. 7, lines 748-50. Thus, the above claim limitations are obvious in view of the combination.

10. Regarding claims 16-17, 42-43, 73-74, Schoening teaches client on the same or different computer, col. 39, lines 251-60. Thus, the above claim limitations are obvious in view of the combination.

11. Regarding claims 19, 45, 76, Schoening teaches avoiding deadlocks, col. 3, lines 24-30 and in Furlani at col. 11, lines 40-42. Thus, the above claim limitations are obvious in view of the combination.

12. Regarding claims 20, 46, 77, Schoening teaches ignoring input from a 2nd requester, col. 40, lines 65-67. Thus, the above claim limitations are obvious in view of the combination.

13. Regarding claims 21-22, 47-48, 55-56, 78-79, Schoening teaches the same or different requesters, col. 18, lines 6-14. Thus, the above claim limitations are obvious in view of the

combination.

Response to Amendment

14. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

15. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

16. Applicant suggests "Schoening's request for initiating parallel processing of a component results in [a] determination of whether that component can be run in parallel with another component, and placement on an appropriate thread, without waiting on a response", Paper No. 8, Page 3, lines 15-17. But said admitted "determination of whether that component can be run in parallel" reads on "waiting on a response" while said determination is made. That this may be done "prior to the dispatch of threads" is irrelevant, and is beyond he applicant's claim language. The purpose of the inventions may be different, but the teachings read on the claim language. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

17. Applicant suggests the "ordering [of] the dispatch of component threads, where some are run in parallel, without regard to whether the threads are selected from a set of thread pools that has been altered", Paper No. 8, Page 4, lines 7-9. But if processes are determined to run in parallel versus not in parallel then dependent on this determination the thread pools are altered. The broad claim language can be interpreted many ways, not only the limited was as argued. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

18. Applicant suggests "but each component's status as a member of the set of executable components is not being altered", Paper No. 6, Page 7, lines 4-6. The partial order described in Schoening as "a partial order evaluator evaluates the partial order", col. 41, lines 11-12 consists of eligible thread pools. There are numerous intermediary steps to determine a final process that arguably reads as eligible thread pools in a method to determine a final process. The reference to applicant's silence was not understood. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

19. Applicant suggests "the application of such preconditions is not done 'on the fly' and thus, is not dynamic", Paper No. 8, Page 4, lines 18-19. Schoening does not require these processes to be evaluated prior to run-time, and surely this whole process is arguably dynamic. The references should not be read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

20. Applicant suggests "the merging of groups and group locks in Furlani does not describe or suggest alteration of eligible thread pools" ... "Furlani's groups are groups of objects (e.g. data structures) rather than pools of thread", Paper No. 8, Page 6, lines 11-14. First, as with the parallel threads in Schoening, the groups and/or merging/locks both alter processing pools dependent on whether they are locked or merged. Second, an object includes processing such as a thread when interpreted broadly, unless the specification has a reasonable lexicographic

definition that is different that could not be found in the present specification. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

21. Applicant suggests "avoidance of deadlock", Paper No. 8, Page 7, line 24 is not taught.. First, how is such a prediction done to determine if there is a deadlock, and then how is a deadlock avoided with claim 19. In any event, deadlock avoidance is taught in Furlani at col. 11, lines 40-42. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

22. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

23. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

26. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

February 20, 2003

LE HIEN LUU
PRIMARY EXAMINER